

WHAT IS CLAIMED IS:

1. A method for installing a plurality of wick structures in a heat pipe, comprising:

(a) fabricating the wick structures into a first elongated continuous coil tape,
5 the first coil tape having a width approximately same as a circumference of an internal diameter of the heat pipe;

(b) rolling an end of the first coil tape in a width direction and clamping the end of the first coil tape to an end of a rod, which has an external diameter originally narrower than the internal diameter of the heat pipe, and narrowing
10 the end of the first coil tape rolled to be smaller than the internal diameter of the heat pipe;

(c) drawing the rod to carry the coil tape from an end of the heat pipe to an opposite end thereof, and installing the rolled first coil tape in the heat pipe; and

15 (d) cutting off the first coil tape extending out of the heat pipe for finishing installation of the wick structures in the heat pipe.

2. The method of claim 1, wherein step (a) includes rolling the first coil tape on a first reel for continuous processing.

3. The method of claim 1, wherein step (a) includes fabricating a plurality of
20 supporting bodies into a second elongated continuous coil tape to be fed into the heat pipe and currently with the wick structures, the first and second coil tapes being adjacent to and overlapping each other.

4. The method of claim 3, wherein the supporting bodies are rolled on a

second reel for continuous processing.

5. The method of claim 1, wherein step (b) includes rolling and narrowing the first coil tape receivable in the outlet of the heat pipe in one-step or multiple-steps manners.

5 6. The method of claim 5, wherein the first coil tape is rolled by a roll-forming mold.

7. The method of claim 1, further including reducing an external diameter of the heat pipe with a tube drawing process after step (d).

8. An apparatus adopted for installing a plurality of wick structures in a heat
10 pipe, comprising:

a base having a work path defined overhead;

a hauling mechanism disposed on the base and being movable around a termination of the work path, wherein the hauling mechanism has an end connecting to an end of a rod, the rod extending along the work path towards a
15 start of the work path and having a clamping portion arranged on an opposite end;

a fixed mechanism disposed on the work path and orienting the heat pipe on the work path; and

at least two cutting-off mechanisms arranged on the work path and
20 respectively being adjacent to two opposing outlets of the heat pipe.

9. The apparatus of claim 8, further including a first rear adjacent to a start of the work path.

10. The apparatus of claim 8, further including two rears adjacent to a start of

the work path, the two rears respectively disposed in a front and a rear relating to the front.

11. The apparatus of claim 8, further including a roll-forming mold disposed between a start of the work path and the heat pipe.

5 12. The apparatus of claim 11, wherein the roll-forming mold has a first module, a second module and a third module respectively having a first aperture, a second aperture and a third aperture, wherein the first aperture has a horizontal straight-line cross-section, the second aperture has an arched cross-section, and the third aperture has a curvilinear cross-section.

10 13. The apparatus of claim 12, wherein the each of the first, second and third modules has a passageway formed thereon.